

**UNITED STATES DEPARTMENT OF COMMERCE****Patent and Trademark Office**Address: COMMISSIONER OF PATENTS AND TRADEMARKS  
Washington, D.C. 20231

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.
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09/559,690 04/27/00 BRENNER

D 1235

027310 HM22/1002  
PIONEER HI-BRED INTERNATIONAL INC.  
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JOHNSTON IA 50131

EXAMINER

RENZI, G.

ART UNIT	PAPER NUMBER
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1638  
**DATE MAILED:**

10/02/01

Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner of Patents and Trademarks

<b>Office Action Summary</b>	Application No.	Applicant(s)	
	09/559,690	BRENNER, DELMAR	
	Examiner Gary Benzion, Ph.D.	Art Unit 1638	
<i>-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --</i>			
<b>Period for Reply</b>			
A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.			
<ul style="list-style-type: none"> <li>- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.</li> <li>- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.</li> <li>- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.</li> <li>- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).</li> <li>- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).</li> </ul>			
<b>Status</b>			
1) <input type="checkbox"/> Responsive to communication(s) filed on ____. 2a) <input type="checkbox"/> This action is <b>FINAL</b> .                  2b) <input checked="" type="checkbox"/> This action is non-final. 3) <input type="checkbox"/> Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213.			
<b>Disposition of Claims</b>			
4) <input checked="" type="checkbox"/> Claim(s) <u>1-49</u> is/are pending in the application. 4a) Of the above claim(s) ____ is/are withdrawn from consideration. 5) <input type="checkbox"/> Claim(s) ____ is/are allowed. 6) <input checked="" type="checkbox"/> Claim(s) <u>1-49</u> is/are rejected. 7) <input type="checkbox"/> Claim(s) ____ is/are objected to. 8) <input type="checkbox"/> Claim(s) ____ are subject to restriction and/or election requirement.			
<b>Application Papers</b>			
9) <input type="checkbox"/> The specification is objected to by the Examiner. 10) <input type="checkbox"/> The drawing(s) filed on ____ is/are: a) <input type="checkbox"/> accepted or b) <input type="checkbox"/> objected to by the Examiner. Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).			
11) <input type="checkbox"/> The proposed drawing correction filed on ____ is: a) <input type="checkbox"/> approved b) <input type="checkbox"/> disapproved by the Examiner. If approved, corrected drawings are required in reply to this Office action.			
12) <input type="checkbox"/> The oath or declaration is objected to by the Examiner.			
<b>Priority under 35 U.S.C. §§ 119 and 120</b>			
13) <input type="checkbox"/> Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) <input type="checkbox"/> All    b) <input type="checkbox"/> Some * c) <input type="checkbox"/> None of: 1. <input type="checkbox"/> Certified copies of the priority documents have been received. 2. <input type="checkbox"/> Certified copies of the priority documents have been received in Application No. ____. 3. <input type="checkbox"/> Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)). * See the attached detailed Office action for a list of the certified copies not received.			
14) <input type="checkbox"/> Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application). a) <input type="checkbox"/> The translation of the foreign language provisional application has been received.			
15) <input type="checkbox"/> Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.			
<b>Attachment(s)</b>			
1) <input type="checkbox"/> Notice of References Cited (PTO-892) 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) 2.		4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s) ____. 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) 6) <input type="checkbox"/> Other: _____.	

*Status of the Application*

Claims 1-49 are pending.

***DEPOSIT OF BIOLOGICAL MATERIAL.***

The statement at page 44 of the specification that indicates applicants' intention to make an enabling deposit of the claimed invention, with the American Type Culture Collection (ATCC), is noted. In the even of the maturation of the application to allowable status, under 37 CFR 1.809(c)(d), the applicants are require to make a deposit of seed of the invention within **three months** after the mailing date of the Notice Of Allowance and Issue Fee Due. The period for satisfying this requirement is **not extendible** and failure to make an enabling deposit **will result in abandonment of the application for failure to prosecute**. The deposit statement in the specification, and the claims, must be amended to include the deposit accession number. The statement of deposit in the specification must comply with that set forth in 37 CFR 1.801-1.809, and shall contain:

- (1) The accession number for the deposit(s);
- (2) The date of the deposit(s);
- (3) A description of the deposited biological material sufficient to specifically identify and to permit examination; and
- (4) The name and address of the depository. (See 37 CFR 1.809(d)).

*Issues under 35 U.S.C. § 112.*

Claim 33 is rejected under 35 U.S.C. § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

The recitation of "said maize plant" is both vague and indefinite as it lacks a clear antecedent basis as to which plant is being referred to.

Claims 1-49 are incomplete in the recitation of the limitation "representative seed having been deposited under ATCC accession number \_\_\_\_" as set forth in claims 1, 6, 21, 25, 37 and 40. In the interest of compact prosecution, Applicants may refrain from amending the claim until the time of the actual

deposit as set forth in 37 CFR 1.801-1.809. Failure to amend claim 1, 6, 21, 25, 37 and 40, however, will result in abandonment for failure to prosecute.

Claims 37-39 are rejected under 35 U.S.C. § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

The process step in part (c) of "identifying said inbred plants;" is both vague and indefinite in failing to set the metes and bounds of the invention. It is noted that a hybrid plant comprises at least two parents and, in the claimed invention, must comprise at least inbred *PHOR8* as one parent. The method steps do not teach or identify how the person having skill in the art would identify *PHOR8* from the other parent(s) of the hybrid and as such fail to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Furthermore the steps of identifying the plants with decreased vigor and identifying plants with homozygous genotypes fails to distinguish the parent, which is not *PHOR8*. Additionally noted is the limitation in part (e) "in a manner which preserves the homozygosity of said inbred ..." fails to set the metes and bound or provide a positive method step to meet the requirement to preserve the homozygosity of the plant. Amending the claim to recite a positive method step, such as selfing to preserve homozygosity or further limitation to the degree of homozygosity would serve to obviate this rejection.

Claims 40-46 are rejected under 35 U.S.C. § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

The process steps in to produce a *PHOR8*-derived maize plants comprises the steps of crossing the inbred plant with itself or another maize plant, in which this process step is repeated from 0 to 7 times, to generate further *PHOR8*-derived maize plants, and plants produced there from. The limitation "with itself or another maize plant" is not limited to inbred *PHOR8*, and as such is drawn to any maize plant which is capable of meeting the limitation to yield progeny maize seed, to encompass all of maize *per se*. The method and progeny there from comprise the art-recognized steps, and results, of backcross breeding, in which one or several traits are introgressed into a recurrent parent from a donor parent. As claimed, inbred *PHOR8* may comprise either parent, in which one or more characteristics may be move from one parent

into the other. In this regard, official notice is taken of the teaching of Allard<sup>1</sup> with regard to backcross breeding stating::

Six backcrosses coupled with rigid selection in early generations have proven satisfactory in a large number of backcross-breeding programs completed at the California station. ... After the third backcross, however, the population usually resembles the recurrent parent so closely that selection on an individual-plant basis is largely ineffective except for the characteristic being transferred.

Clearly, the metes and bounds of the phrase "derived from" would encompass both plants that are essentially prior art plants and those that are essentially identified as the instant inbred. Thus, the claimed invention is indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

*Prior art.*

Claims 1-49 are free of the prior art in view of the combination of distinguishing characteristics set forth in the specification. Claims 1-49 would be allowable if rewritten or amended to overcome the rejection(s) under 35 U.S.C. § 112 set forth in this Office Action.

No claims is allowed.

*Inquires*

Any inquiry concerning this or earlier communication from the examiner should be directed to Gary Benzion, Ph.D. whose telephone number is (703) 308-1119. The examiner can normally be reached on Monday-Friday from 7:00 AM to 3:30 PM. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Paula Hutzell, can be reached on (703)-308-4310. Any inquiry of a general nature or relating to the status of this application should be directed to the Patent Analysts, Gwendolyn Payne, whose telephone number is (703) 305-2475. Papers related to this application may be submitted to Group 1600 by facsimile transmission. Papers should be faxed to Group 1600 via the PTO

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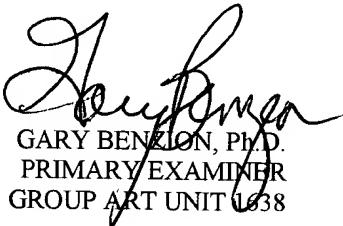
<sup>1</sup> At page 156 in Principles of Plant Breeding.

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Fax Center located in Crystal Mall 1. The faxing of such papers must conform with the notice published in the Official Gazette, 1096 OG 30 (November 15, 1989).

Benzion  
9/30/01

  
GARY BENZION, PH.D.  
PRIMARY EXAMINER  
GROUP ART UNIT 1638